DOCUMENT RESUME

ED 054 649 EM 009 249

AUTHOR Greenberg, Bradley S.; Gordon, Thomas F.

TITLE Children's Perceptions of Television Violence: A Replication.

INSTITUTION Michigan State Univ., East Lansing. Coll. of Communication Arts.

SPONS AGENCY National Inst. of Mental Health (DHEW), Bethesda, Md.

PUB DATE Jul 71

NOTE 33p.; Violence in the Media Project

EDRS PRICE MF-$0.65 HC-$3.29

DESCRIPTORS Aggression; *Commercial Television; *Disadvantaged Youth; Males; Negro Attitudes; Perception; *Race Influences; *Socioeconomic Influences; Stimulus Behavior; Teenagers; Television; Television Research; *Violence

ABSTRACT

An earlier study (ED 048 772) sought to determine the perceptions of televised violence among pre-teen males from varying racial and socio-economic backgrounds. In this replication of the study teenage boys were used as subjects. The general method of the study was to show the boys a sequence of television vignettes, comprised of violent and nonviolent scenes. The subjects' responses to the scenes as well as their socio-economic and race were determined. The earlier study showed a racial factor in the amount of violence perceived, but this study showed no differences among the groups. The earlier study showed an income and race difference in the perceived acceptability of violence, while this study showed only a race difference. Both studies showed that lower socio-economic subjects, black subjects in particular, professed a greater liking for the violent scenes than did other groups. The previous study found an income difference based on the perceived reality of the violent scenes, while this study found both an income and a race difference. This study looked at one additional factor, humor. It was found that youngsters from more disadvantaged homes perceived significantly more humor in the violent scenes. (JY)

ED054649

MICHIGAN STATE UNIVERSITY

Department of

COMMUNICATION

College of Communication Arts

Project VIM

Violence in the Media

CHILDREN'S PERCEPTIONS OF TELEVISION VIOLENCE: A REPLICATION

Bradley S. Greenberg and Thomas F. Gordon

Report #7

July, 1971

VIM Research Reports

1. "Critics' and Public Perceptions of Violence in TV Programs," Bradley S. Greenberg and Thomas F. Gordon. September, 1970.

2. "Attitudes Toward Violence: The Interaction of TV Exposure, Family Attitudes and Social Class," Joseph R. Dominick and Bradley S. Greenberg. November, 1970.

3. "Social Class and Racial Differences in Children's Perceptions of Television Violence," Bradley S. Greenberg and Thomas F. Gordon. February, 1971.

4. "Girls' Attitudes Toward Violence as Related to TV Exposure, Family Attitudes, and Social Class," Joseph R. Dominick and Bradley S. Greenberg. February, 1971.

5. "Violence in Television: The Industry Looks at Itself," Thomas F. Baldwin and Colby Lewis, April, 1971.

6. "Children's Television Behaviors as Perceived by Mother and Child," Bradley S. Greenberg, Philip M. Ericson and Mantha Vlahos, July, 1971.

7. "Children's Perceptions of Television Violence, A Replication," Bradley S. Greenberg and Thomas F. Gordon. July, 1971.

Working Papers

1. "Television Violence: A Content Classification Within An Aggression Inhibition Framework," Thomas F. Gordon, May, 1971.

2. "Predicting Mass Media Effects: A Cognitive Approach," Thomas F. Gordon, May, 1971.

3. "Verbal Aggression," C. Edward Wotring, May, 1971.

ED054649

U.S. DEPARTMENT OF HEALTH,
EDUCATION & WELFARE
OFFICE OF EDUCATION
THIS DOCUMENT HAS BEEN REPRODUCED EXACTLY AS RECEIVED FROM THE PERSON OR ORGANIZATION ORIGINATING IT. POINTS OF VIEW OR OPINIONS STATED DO NOT NECESSARILY REPRESENT OFFICIAL OFFICE OF EDUCATION POSITION OR POLICY.

CHILDREN'S PERCEPTIONS OF TELEVISION VIOLENCE: A REPLICATION

By

Bradley S. Greenberg and Thomas F. Gordon

July, 1971

Department of Communication

Michigan State University

The research upon which this report is based was performed pursuant to Contract No. NSM 42-70-32 with the National Institute of Mental Health, Health Services and Mental Health Administration, Department of Health, Education and Welfare.

The research staff for this project included Tom Allen, Phil Ericson, Larry Kincaid, Mantha Vlahos, Esther White, and Edward Wotring. Professor Carol Smith, Western Michigan University, arranged for the use of public school students in Kalamazoo, Michigan. We are grateful to the public schools of that city for their cooperation in this and other projects.

Earlier, we reported the results of a study designed to determine the perceptions of televised violence among pre-teen males from varying racial and socio-economic backgrounds (Greenberg and Gordon, 1971). The basic rationale of the study posited that greater exposure to real-life aggression -- a more common phenomenon among the disadvantaged -- manifests itself in greater tolerance for aggressive behavior whether real or mediated. The same rationale pertains here.

There is much evidence to indicate that physical aggression is more readily known to youngsters from lower income environments. In such homes, physical punishment is used to control behavior more often than is a verbal approach. Outside the home, the environment is more likely to be hostile for the low-income child (Chilman, 1965; Clark, 1965; Gans, 1962; Moles, 1965; Sears, 1961; U.S. Government, 1968).

The youngster who has been exposed more frequently to greater amounts of real-life aggression may have a higher tolerance for television violence. For these reasons, the earlier study and the present one tested these hypotheses:

H_1: The less advantaged youngster will perceive less violence in a given segment of TV violence than will a middle-class youngster.

H_2: The less advantaged youngster will judge mediated violence as a more acceptable mode of behavior than the middle-class viewer.

H_3: The less advantaged youngster will see TV violence as being more realistic than his middle-class counterpart.

Some sub-hypotheses were tested. For one, the disadvantaged youngster should be particularly attracted to television content which is high in action and excitement. Programs which contain heavy doses of violence should be more arousing, given a home environment in which passivity and verbal interaction are secondary to direct action. These hypotheses also were examined:

H_4: The less advantaged youngster will judge violence as more enjoyable to watch.

H_5: The less advantaged youngster will testify to more self-arousal from TV violence.

Separate hypotheses for racial differences were not stipulated. It was assumed that among the poor, the blacks were even more disadvantaged. Thus, they should exhibit a higher degree of the postulated behaviors.

Finally, we tested two hypotheses extracted from Himmelweit (1958) and Berkowitz (1964):

H_6: Violent scenes with weapons will be perceived as more violent than violent scenes without weapons.

H_7: Violent scenes with weapons will be perceived as less realistic than violent scenes without weapons.

In the first study, conducted with 325 fifth-grade boys, these major results were found for the hypotheses:

H_1: No social class difference, but a sharp racial distinction, with the low-income black youngsters perceiving significantly less violence in the same scenes than any other comparison group.

$H_{2, 3, 4}$: The more disadvantaged youngsters, whether white or black, judged the behavior in violent scenes as more acceptable, saw violent scenes as more like real life, and liked watching the violent scenes more.

H_5: No arousal factor emerged from the attitudinal data.

$H_{6,\ 7}$: Scenes of violence with weapons were judged as more violent and less real than weaponless scenes.

The present study encompasses the same hypotheses, applied to a different population group. We shifted upward in age to determine whether results obtained with 10-year-olds would be replicated with a teen-age group, specifically, 14-year-olds. The basic purpose of the study was to examine the generalizability of the earlier results.

METHODS

The methods were identical to those implimented earlier with the fifth-grade boys (Greenberg and Gordon, 1971). Here, we will briefly summarize the methods, given the availability of more complete details in our first report.

In general, boys in their early teens were shown a sequence of television vignettes, comprised of violent and nonviolent scenes. The experimental scenes ranged from 15-37 seconds each.[1] Viewing was done in groups of six-eight boys, in a room in their public school. The youngsters' responses were in terms of verbal scale ratings of each of the scenes. The schools from which the youths came, and hence the youths themselves, were differentiated in terms of socio-economic status and race.

Video Materials

Two versions of video-tape materials were used. Each tape contained the identical practice stimulus and two identical control (non-violent) scenes. Each version had four different scenes of violence, matched for

---

[1]A complete description of the scenes is in Appendix 1. The appended description of scenes in our first report inadvertently omitted one scene and mislabeled another.

content and length. The kinds of violence depicted in each version included destruction of property, physical assault against others, and intentional killing of others. All scenes came from commercial prime time TV programs. The order of presentation for each version, held constant, was: practice scene; one violent scene; control scene; two violent scenes; control scene, and final violent scene.

Subjects

The public schools in Kalamazoo, Michigan, provided the subject pool. A total of 263 eighth-grade boys were used from the three junior high schools in the community, designated by the superintendent's office as primarily containing pupils from lower, middle and upper-middle income families. Parental permission slips were used, but only a trivial number of non-permissions were received. By race and social class, the subjects were distributed as follows: 66 black lower-class; 78 white lower-income; 37 white middle-class; and 82 white upper-middle-class boys.

Instrument

The test instrument was identical to that used in the earlier study. It consisted of 15 items, three each for five hypothesized attitudinal dimensions. The following are sample items for each dimension:

Degree of Violence
Was what you saw.....___Extremely Violent
___Very Violent
___Pretty Violent
___Not Very Violent

Acceptability of the Behavior
Is it.....___Very Right For People To Be This Way
___A Little Right
___Not Very Right
___Not Right At All For People To Be This Way

Liking of the Content

Was what you saw a show like....___You Really Like To See
___You Sometimes Like To See
___You Don't Like To See Very Much
___You Don't Like To See At All

Degree of Arousal

What you saw was.....___Not Very Exciting
___A Little Exciting
___Very Exciting
___Extremely Exciting

Perceived Reality

What you saw was.....___Very Much Like Real Life
___Pretty Much Like Real Life
___Not Much Like Real Life
___Not At All Like Real Life

The complete set of items is in Table 1 of the results section, together with empirical verification of the dimensions from both this and the prior study.

Procedures

Testing was conducted in January, 1971. Each school provided a room large enough for the video-tape equipment and for 6-8 children seated in front of a TV set. The boys were told that we wanted their reactions to scenes from regular TV programs, that this was not a test, and would in no way affect their classroom evaluation. They made no personal identification on the instrument. Booklets were coded for race and version after the boys left the viewing room.

Subjects first viewed the practice scene. The experimenter completed two or three items with them to clarify how they were to proceed. The boys completed the remaining items for the practice scene and were questioned as to difficulties with words or procedures. The subjects were then shown six remaining scenes, and rated each scene immediately after viewing it. On the average, it took 25-30 minutes to view and rate all seven scenes.

Upon completion, the boys were asked not to talk to their classmates about what they had done until everyone had participated. Teachers did not discuss the children's experiences with the class until testing in that school was completed.

RESULTS

Four major analyses were completed: (1) a factor analysis of the test items, (2) a comparison of racial and social class differences in response to the stimuli, (3) an examination of differences between kinds of violence, and (4) a check on relative perceptions of the control and experimental scenes. Results are presented in that order. Each is compared to the results of the first study.

Item Analysis

Responses to all items, across all respondents, for all violent scenes, were intercorrelated and then submitted to a principal axis actor analysis with varimax rotation. This was done to determine the extent to which the attitude items were used by the respondents in the same way they were conceived by the investigators. A summary of this analysis is in Table 1.

In the first study, there were three major factors and a minor one. In this replication, there were three major factors and two minor ones.

A principal attitude dimension was that of perceived Violence. In each study, the same four violence items had their highest loadings on one factor. These items tapped the judged anger, violence, cruelty and seriousness apparent to the respondents. The first three items were designated, a priori, as a violence perception factor. This factor accounted for about one-sixth of the total variability in judgment of the TV stimuli.

A second major factor was that of judged Acceptability of the content. In both the original study and this replication, the three items originally designed to tap this area of judgment fit best on this single factor. Together, they accounted for another one-sixth of the total variance.

TABLE I

Factor Items

Factor 1. Perceived Violence ITEMS:		Factor Loadings Study 1	This Study
Were the people.....	___Not Very Angry ___A Little Angry ___Very Angry ___Extremely Angry	... .64	.69
Was what you saw.....	___Not Very Violent ___Pretty Violent ___Very Violent ___Extremely Violent	... .58	.84
Was what you saw.....	___Not Very Serious ___A Little Serious ___Pretty Serious ___Very Serious	... .71	.73
Was what you saw.....	___Not Very Cruel ___A Little Cruel ___Pretty Cruel ___Very Cruel	... .58	.72
	% Total Variance	(17%)	(18%)

Factor 2. Perceived Acceptability ITEMS:		Factor Loadings Study 1	This Study
Is it	___Very Right For People To Be This Way ___A Little Right ___Not Very Right ___Not Right At All For People To Be This Way	... .84	.78
Was what you saw.....	___A Very Good Thing To do ___A Pretty Good Thing ___A Pretty Bad Thing ___A Very Bad Thing To Do	... .82	.82
Is it.....	___Very Nice For People To Act Like This ___Pretty Nice ___Not Very Nice ___Not Nice At All For People To Act Like This	... .81	.81
	% Total Variance	(17%)	(18%)

TABLE 1 (contd.)

Factor Items			
Factor 3. Professed Liking		Factor Loadings	
ITEMS:		Study 1	This Study
What you saw was.....	___A Very Good Thing To Watch		
	___A Pretty Good Thing		
	___A Pretty Bad Thing	... .77	.75
	___A Very Bad Thing To Watch		
Was it.....	___A Wonderful Show		
	___A Pretty Good Show		
	___A Pretty Bad Show	... .80	.85
	___A Terrible Show		
Was what you saw a show like...			
	___You Really Like to See		
	___You Sometimes Like To See	... .79	.86
	___You Don't Like To See Very Much		
	___You Don't Like To See At All		
		% Total Variance (*)	(17%)
Factor 4. Perceived Humor		Factor Loadings	
ITEMS:		Study 1	This Study
What you saw was.....	___A Very Funny Thing To See		
	___A Pretty Funny Thing		
	___A Pretty Sad Thing	... .77	.85
	___A Very Sad Thing To See		
Does what you saw....	___Make You Feel Like Laughing A Lot		
	___Make You Feel Like Laughing A Little	... .70	.88
	___Not Make You Feel Like Laughing Very Much		
	___Not Make You Feel Like Laughing At All		
		% Total Variance (*)	(13%)

*Factor 4 items were both in Factor 3 in Study 1. The 5 items together accounted for 25% of the total variance.

TABLE 1 (contd.)

Factor 5. Perceived Reality.....Factor Loadings

ITEM:		Study 1	This Study
What you saw was.....	___Very Much Like Real Life ___Pretty Much Like Real Life ___Not Much Like Real Life ___Not At All Like Real Life	... .87	.86
	% Total Variance	(7%)	(7%)

The following items were too impure to assign to a single factor:

What you saw was.....	___Not Very Exciting ___A Little Exciting ___Very Exciting ___Extremely Exciting	
Was what you saw.....	___Very Much For Fun ___Pretty Much For Fun ___Not Very Much For Fun ___Not For Fun At All	

In the original study, the third factor was professed Liking for the content depicted in the scenes. Five scales formed the original factor; in this study, three of the same five items persisted and are considered a liking dimension. They are the three items designed to tap this dimension of attitude, and they account for another one-sixth of the respondents' judgmental variation.

The two items which dropped off the Liking factor of the first study loaded as a fourth factor. Both scales--how funny the scenes were and how much they made the respondent feel like laughing -- were originally constructed as part of an arousal index. Given the humor component in each of them, it appears appropriate to re-label this two item factor as perceived Humor.

The final factor was but a single item -- as it had been in the first study. It assessed the Reality of the television scenes.

Two items were impure, equally in both studies, so that they were dropped from all subsequent analyses. No interpretable arousal factor appeared in either study.

In the original study, the four emergent factors -- Violence, Acceptability, Liking and Reality -- accounted for 66 percent of the total variance. In this study, the five factor solution, the fifth being Humor, accounted for 73 percent of the total variance in judgment.

Social Class and Racial Differences in Perceptions of Televised Violence

The basic proposition of this study was that attitudinal assessments of television violence would order among the male respondent groups in this fashion: upper-income whites, middle-income whites, lower-income whites, lower-income blacks. Overall class differences were predicted with the racial comparison expected to intensify such differences.

Item scores were summed for those items on each of the five dimensions of judgment extracted through the factor analytic procedure. To analyze the two versions of the experimental stimuli, given repeated measures within each version, a Friedman two-way rank-order analysis of variance was used (Siegel, 1956). After this basic analysis, we also did subanalyses for each of the five dependent variables which: (1) compared the respondent groups within each scene; (2) compared the respondent groups by collapsing across the eight replicate scenes; and (3) compared the two combined lower-income groups against the two combined higher-income groups.

Perceived Violence. Table 2 presents the mean values for the perceived violence dimension. The data do not support the hypothesis for this 14-year-old test group. There was not less violence perceived by the lower-income groups. As will be seen, this is the only major portion of the findings which fails to replicate from the earlier study. The four groups do not order either in a linear or curvilinear fashion. If anything, the boys from the highest income group reported that the violent scenes were least violent. In the earlier study, it was the blacks who reported least violence, with the three white groups roughly comparable in their estimates. For these respondents, no single scene produced significant differences in perceived violence. The means collapsed across the eight scenes did not yield differences. The social class comparison -- the two lower class groups vs. the two higher income groups -- did not yield differences.

The scenes in Table 2 are ordered from most to least violent. The order correlates .83 with that from the first study. The two weapon murders were perceived as most violent, a fist fight and furniture breaking scene as least violent.

TABLE 2

PERCEIVED VIOLENCE[1]

Scene:	Social Group: Black Lower	White Lower	White Middle	White Upper
Shotgun Killing	13.08(3)	12.80(1)	13.32(4)	13.06(2)
Pistol Killing	12.93(3)	12.79(1)	13.93(4)	12.80(2)
Death by Fiery Car Crash	12.68(2)	13.14(3)	13.32(4)	12.55(1)
Fist Fight #1	13.08(4)	12.71(2)	12.86(3)	12.55(1)
Suffocation Killing	12.72(3)	12.05(1)	13.53(4)	12.31(2)
Smashing Car	12.31(3)	12.28(2)	12.40(4)	11.66(1)
Smashing Furniture	12.03(3)	12.51(4)	11.13(1)	11.32(2)
Fist Fight #2	11.07(1)	11.72(3)	11.87(4)	11.23(2)
Sum of Ranks:	(22)	(17)	(28)	(13)
	$(X_r^2 = 9.45, p < .05)$			
Mean ratings across scenes:	12.52	12.47	12.77	12.21

[1]The larger the mean, the more violence; a rank of 1 equals least perceived violence.

The mean rating of violence in these scenes for the four respondent groups was approximately 12.50, on a scale ranging from 4-16. It was approximately 13.0 for the earlier study, indicating somewhat less overall violence, as judged by the older boys. Thus, for the eighth grader, judgments of amount of violence for a set of television vignettes, did not relate to the race or income background of the viewers in any meaningful fashion.

Perceived Acceptability. Table 3 presents the data for this attitude factor. The analysis of variance by ranks was significant across the four groups for the eight violent scenes ($p < .01$). This difference was solely one of race. The black youngsters found the scenes significantly more acceptable than any other viewer group.

In the earlier study, there was a parallel race difference. As the ranks and means in Table 3 indicate, a racial difference existed for 7 of 8 scenes. Although the differences for any one scene were not statistically significant, the collapsed means across the eight scenes corroborated the racial difference ($p < .10$).

The scenes are ordered in Table 3 from most to least acceptable, and the order correlates .98 with the scene ordering in the fifth graders' study. Two scenes switched adjacent order positions. Least acceptable were the scenes of killings, in maximum contrast to the fighting scenes, and furniture breaking.

The scale of acceptability had a range of 3-12. The mean for the black youths in the present study was 9.59, and 9.44 in the earlier study. The means for the three other groups exceeded 10.0 in each study. No group judged the behavior as acceptable, but the black youngsters were less negative in all comparisons.

TABLE 3

PERCEIVED ACCEPTABILITY[1]

Scene:	Social Group: Black Lower	White Lower	White Middle	White Upper
Fist Fight #2	(1) 8.17	(4) 8.67	(3) 8.47	(2) 8.34
Smashing Furniture	(2) 9.11	(4) 9.80	(1) 9.09	(3) 9.45
Fist Fight #1	(1) 9.24	(3) 9.71	(2) 9.64	(4) 10.04
Smashing Car	(1) 9.55	(4) 10.28	(3) 9.87	(2) 9.66
Death by Fiery Car Crash	(1) 9.38	(3) 10.20	(4) 10.23	(2) 10.02
Shotgun Killing	(1) 10.22	(2) 10.77	(3) 10.82	(4) 10.91
Pistol Killing	(1) 10.55	(3) 10.98	(4) 11.13	(2) 10.80
Suffocation Killing	(1) 10.62	(3) 11.14	(4) 11.33	(2) 11.09
Sum of Ranks:	(9)	(26)	(24)	(21)
	($\chi_r^2 = 13.05$, $p < .01$)			
Mean ratings across scenes:	9.59	10.20	10.05	10.05

[1]The larger the mean, the less acceptable the content; a rank of 1 equals most acceptable.

Professed Liking. Table 4 contains the mean ratings in terms of how much the scenes were enjoyed. Here, the rank order analysis of variance was marginally significant and emphasized a racial difference ($p < .10$). The highest level of liking for these violent scenes came from the black youths. Second, the eight violent scenes were collapsed and a one-way analysis of variance was computed for the group means in Table 4. The significant difference ($p < .001$) provided stronger support for the posited interpretation of the differences.

For four of the individual scenes, the set of means is consistently different, with the black youths on one extreme, and the upper-income white youths on the other. If one collapses the data for the two lower-income groups, and compares them with the collapsed middle and upper groups, the difference between income groups is significant ($p < .02$). However, the main contributor to this difference remains the striking divergence between the blacks and the upper-income whites. In the first study, the difference was more one of income than of race in professed liking of the content. Here, it is primarily a difference between the extreme income groups.

The scenes are listed in Table 4 from most enjoyed to least enjoyed. This order correlates .85 with the first study. Most liked were the fight scenes; least liked were the killings.

In terms of the level of liking for the content, the scale range was 3-12. The black youngsters were saying that the scenes were between 'very good' and 'pretty good' things to watch. The white viewers were saying the scenes were between 'pretty good' and 'pretty bad' to watch. The means for all the eighth-grade groups reflected more liking for this kind of content than the means obtained for the parallel fifth-grade groups.

TABLE 4

PROFESSED LIKING[1]

Scene:[2]	Social Group: Black Lower	White Lower	White Middle	White Upper
	(1)	(4)	(3)	(2)
Fist Fight #2	4.17	4.98	4.87	4.71
	(1)	(2)	(3)	(4)
Fist Fight #1*	4.27	5.46	5.64	5.72
	(1)	(3)	(2)	(4)
Smashing Car	5.21	5.63	5.47	5.83
	(1)	(3.5)	(2)	(3.5)
Smashing Furniture*	5.08	6.43	6.23	6.43
	(1)	(3)	(2)	(4)
Death by Fiery Car Crash*	4.92	6.43	5.91	6.66
	(1)	(2.5)	(2.5)	(4)
Shotgun Killing*	5.19	6.77	6.77	6.89
	(4)	(1)	(2)	(3)
Pistol Killing	7.07	6.42	6.67	6.86
	(4)	(3)	(1)	(2)
Suffocation Killing	7.00	6.81	6.67	6.71
Sum of Ranks:	(14)	(22)	(17.5)	(26.5)
	($X_r^2 = 6.64$, $p < .10$)			
Mean ratings across scenes:	5.30	6.10	6.05	6.26

[1]The larger the mean, the less liking; a rank of 1 equals most liking.

[2]Mean differences for individual scenes significant by one-way analysis of variance: *$p < .003$.

Perceived Humor. Table 5 contains the results of this analysis. The reader will recall that this factor exists only for the present study. The two items which form this factor were part of the Liking factor in the original study.

The basic analysis indicates a clear-cut income difference in the perceived humor of the violent scenes, i.e., the youngsters from more disadvantaged homes perceived significantly more humor in the scenes ($p. < .02$). For four individual scenes, this pattern approaches significance; across the eight scenes, the combined lower-class youths perceive significantly more humor ($p < .02$). Thus, the humor results parallel the perceived liking results of the orginial study.

The scenes are ordered in Table 5 from most perceived humor to least. The funniest scene, according to the respondents, was the depiction of a woman smashing a car with a baseball bat; least humorous were the killings.

As to how much humor is seen in violence, the scale range was 2-8. The two disadvantaged groups were at the midpoint of the scale, with the remaining groups about one-half unit on the 'unfunny' side of the scale.

Perceived Reality. Table 6 summarizes the findings. Although a single item comprises this attitude, the findings sharply differentiate perceptions of reality by both income and race. The black youngsters are most prone to say that what they saw was a closer approximation of real life than are the white youngsters. The highest income grouping of white youngsters were least likely to perceive the violent scenes as realistic, less so than their white low-income counterparts ($p < .01$).

For 6 of 8 individual scenes, one-way analyses of variance were significant with the same general pattern. Collapsing across all eight scenes yielded the

TABLE 5

PERCEIVED HUMOR[1]

Scene:	Social Group: Black Lower	White Lower	White Middle	White Upper
Smashing Car	3.38 (1)	3.72 (2)	3.87 (4)	3.83 (3)
Smashing Furniture	3.38 (1)	3.97 (4)	3.91 (3)	3.74 (2)
Fist Fight #1	4.76 (1)	4.77 (2)	5.82 (4)	5.15 (3)
Fist Fight #2	4.59 (1)	4.93 (2)	5.60 (4)	5.40 (3)
Death by Fiery Car Crash	5.57 (1)	6.20 (2)	6.32 (3)	6.38 (4)
Shotgun Killing	5.89 (1)	6.31 (2)	6.82 (4)	6.55 (3)
Pistol Killing	6.62 (3)	5.86 (1)	6.73 (4)	6.49 (2)
Suffocation Killing	7.03 (4)	6.00 (1)	6.27 (2)	6.51 (3)
Sum of Ranks:	(13)	(16)	(28)	(23)

($\chi_r^2 = 10.35$, $p < .02$)

Mean ratings across scenes: 5.12 5.21 5.68 5.50

[1]The larger the mean, the less humor; a rank of 1 equals most humor.

same ordering ($p < .001$). The final sub-analysis, comparing the two lower-income groups with the two higher groups, was also consistent with the above findings ($p < .01$).

The scenes are listed in Table 6 from most to least realistic. Maximum reality was judged to exist in fist fights and car smashing vignettes, least in the furniture breaking and car crash. The order of the scenes correlated .90 with the ordering obtained on this dimension from the fifth-grade boys.

The reality item was "What you saw was (very much, pretty much, not much, not at all) like real life." This item had a scale of 1-4; the absolute scale positions of the groups placed the black youngsters as saying "pretty much like real life," and the white boys at "not much like real life." These reality levels are similar to those found in the original study.

Summary of Social Class and Racial Differences. Figure 1 highlights the comparative findings of the two studies, the first with fifth graders and the present one with eighth graders, all boys.

FIGURE 1

Summary of Findings

Dimensions of Judgment	Study 1	Study 2
1. Perceived Violence	Racial difference	No difference
2. Perceived Acceptability	Income and race difference	Race difference
3. Professed Liking	Income and race difference	Income and race difference
4. Perceived Humor	(not assessed)	Income difference
5. Perceived Reality	Income difference	Income and race difference

TABLE 6

PERCEIVED REALITY[1]

Scene[2]	Social Group: Black Lower	White Lower	White Middle	White Upper
Fist Fight #2**	(2) 1.62	(3) 1.93	(1) 1.60	(4) 2.29
Smashing Car	(2) 1.93	(3) 1.98	(1) 1.80	(4) 2.17
Fist Fight #1**	(1) 1.73	(2) 1.80	(4) 2.41	(3) 2.26
Shotgun Killing*	(2) 1.97	(1) 1.94	(3) 2.31	(4) 2.36
Suffocation Killing	(2) 1.97	(3) 2.23	(1) 1.87	(4) 2.34
Pistol Killing*	(1) 2.03	(3) 2.35	(2) 2.13	(4) 2.63
Death by Fiery Car Crash**	(1) 1.91	(2) 2.29	(3) 2.64	(4) 2.66
Smashing Furniture**	(1) 2.14	(3) 2.54	(2) 2.50	(4) 2.98
Sum of Ranks:	(12)	(20)	(17)	(31)
	($\chi_r^2 = 14.55$, $p < .01$)			
Mean ratings across scenes:	1.92	2.13	2.22	2.48

[1]The larger the mean, the less like real life; a rank of 1 equals most perceived reality.

[2]Mean differences for individual scenes significant by one-way analysis of variance: *$p < .10$ **$p < .01$

Weapons vs. No Weapons

It was posited that weapon-affiliated aggression would be considered more violent than non-weapon aggression. Two tests were made of this hypothesis. First, the violence ratings for the pistol and shotgun scenes were compared with comparable data from the two fist fight scenes. Second, all weapon-bearing scenes were compared with non-weapon scenes. In both comparisons, the differences were significant, as predicted ($p < .01$). The same finding was obtained in the first study.

It was further posited that scenes without weapons would be perceived as more realistic. This was not supported in the present study but was obtained in the earlier one.

Scene Ordering Across Dimensions

We also examined the extent to which the ordering of scenes, as reported above for each dimension, related to the ordering of kinds of violence across dimensions. Given but eight scenes in this analysis, the magnitude of the relationships obtained are of some interest.

In both studies:

a. The ordering of scenes on the Violence dimension was significantly negatively correlated with their ordering on the Acceptability dimension (Rho = -.88 in Study 1 and -.69 in Study 2).

b. The ordering of scenes on the Acceptability dimension was significantly positively correlated with their ordering on the Liking dimension (Rho = .95 in Study 1 and .90 in Study 2).

In Study 1, the ordering of scenes on the Violence dimension was negatively correlated with the Liking dimension (Rho =-.93). In this replication, it approaches significance (Rho = -.54). Further, in this second study, the ordering of scenes on the Perceived Humor dimension was significantly positively correlated with the ordering on both the Acceptability (Rho = .76) and Liking (Rho = .73) dimensions and approached significance on the Violence factor in a negative relationship (Rho = -.57).

Violent vs. Non-Violent Scenes

Means for each factor for the violent (experimental) scenes and the non-violent (control) scenes are in Table 7. Each of the respondent groups found the experimental scenes significantly more violent and significantly less acceptable than the control scenes. The pattern is the same for the two upper-income groups in terms of the Liking dimension. The direction is the same for the two lower-income groups on that dimension, though not significant. In terms of Perceived Humor, the three groups of white respondents found the experimental scenes less humorous than the control scenes; the black low-income youngsters rated the violent and non-violent scenes as equally humorous. As to Perceived Reality, there was no difference in perceived reality between the control and experimental scenes. These differences are presented for descriptive information. Only the differences on the dimension of violence were essential and followed from the logic of this study. Differences in Perceived Liking, Acceptability, etc., would vary had other types of control scenes been used. In the present study, the control scenes consisted of a boy walking with his dog along a mountainside, and a motorcyclist racing around the hills, with other cyclists following him.

TABLE 7

Mean Judgments of Control and Experimental Scenes*

		Black Lower	White Lower	White Middle	White Upper	F	P
Violence	C	5.73	5.60	5.50	5.42	0.53	N.S.
	E	12.52	12.47	12.77	12.21	0.65	N.S.
Acceptability	C	5.92	6.14	6.22	6.01	0.67	N.S.
	E	9.59	10.20	10.05	10.05	2.22	N.S.
Liking	C	5.67	6.22	6.91	7.09	8.72	.001
	E	5.30	6.10	6.05	6.26	5.70	.001
Humor	C	5.21	4.97	5.14	5.30	1.22	N.S.
	E	5.12	5.21	5.68	5.50	2.50	.10
Reality	C	1.79	2.02	2.12	2.26	6.68	.001
	E	1.92	2.13	2.22	2.48	9.34	.001

*The larger the mean the:
-more violence
-less acceptability
-less liking
-less humor
-less reality

C=Control (non-violent scenes); E=Experimental (violent scenes).

It is important to note some of the row differences obtained. The lower-class youngsters, as accentuated by the data for the blacks, liked the control scenes more so than did the upper-income youngsters. For this group, it is not just the violent content that is liked more and found more realistic, it is any kind of TV content. However, in terms of Acceptability, Perceived Humor and Reality, the tendency is for the race/income differences to be particularly apparent for the experimental or violent scenes. Thus, as in the prior study, there is some evidence that the perception differences are not threshhold differences for all of television content, but hold true particularly for violent program content.

DISCUSSION

How do youngsters perceive television violence? Do perceptions differ as a function of the child's background?

The two studies show that violence is clearly recognized and labeled as violence by all groups, that the behavior is not considered acceptable, but that it is enjoyable to watch. Further, it borders on being called real-to-life.

Such perceptions, however, do differ between racial groups and between children of different income levels. Among younger, pre-teen black children, there are lesser perceptions of violence. Among both 10- and 14-year-olds, there is greater liking for violence and greater perceived reality in television violence among the more disadvantaged. Further, the behavior exhibited in violent television scenes is more acceptable to the more disadvantaged. It is also considered to be more humorous.

At best, we have identified both race and income level as differentiating characteristics in such perceptions, without indicating the significance of one

vs. the other. The most plausible conclusion we can suggest is that race intensifies the differences which would exist as a function of low income alone.

The critical question which remains is whether differing perceptions manifest themselves in differential overt behavior, particularly aggressive behavior. Subsequent studies in this area must, it seems to us, include at least two kinds of experimental efforts. One would be to use natural TV content stimuli, exemplified by the type used in the present study, obtain parallel attitudinal information, and then provide an opportunity for the viewers to aggress, preferably in an anti-social fashion. In that manner, one could correlate the acceptability of the message content, or the liking for it, or the perception of how violent it is, with the consequent behavior.

The second approach would be to use the same type of content, but to experimentally induce the appropriate perceptions. The television scenes could be identified for the viewer as acceptable or unacceptable behavior, violent behavior, etc., and subsequent aggressive responses assessed. This has a theoretic linkage to the notions of forewarning, as advanced by McGuire (1966). It could also be used to simulate the kind of information which parents might transmit to their children as they watch such programming.

For example, Hicks (1968) had children watch an aggressive television model in the presence of an adult. While watching, the adult made comments about the actions taking place. The comments were positive for one set of children and negative for the other. The adult remained silent in the control group. In a post-viewing situation, the group hearing positive comments was more aggressive than the negative comments or control groups. The control group was also more aggressive than the negative comments group.

The Berkowitz research on justification of aggression bears some similarities to this approach. By labeling a televised act of violence as justified aggression, which we would associate with the notion of acceptability in the present study, he has consistently obtained more aggressive responses than when the same act is identified as non-justified (1965). Extension of this logic to the variables of perceived violence, perceived reality or humor, or degree of liking would be straightforward. Combining these factors would be a second stage in such a research sequence.

From this, we would project that among subjects for whom a given scene has been identified as low in violence, containing acceptable behavior, which is considered humorous and real, maximum aggressive behavior should result.

The lack of replication of the factor of perceived violence in the present study cannot be overlooked. Among the 10-year-old blacks in the first study, there was a consistent perception of lesser violence. Indeed, it was one of the clearest and cleanest findings in that study. In the 14-year-olds, there was no semblance of that pattern. We have no ready explanation for this finding. Because we used two age groups, rather than the same age group over four years, alternative explanations of generational vs. developmental differences remain inseparable. Although both groups were raised in a television environment, four additional years of watching television violence, while attaining greater physical and psychological maturity, could contribute to the differences. Only subsequent research can identify the causal factors. Most immediately, parallel data among young girls should be acquired and compared with that found for the boys.

This research project adds further input to the study of children and aggression. Perceptions of mediated violence are anticipated to be linked to the child's attitudes toward aggression and his own aggressive behavior. Knowing

responses to mediated violence among specifiable and major sub-groups of the population, particularly among impressionable children, is expected to be critical in examining the general question of effects of TV content.

Other implications of this research are discussed in our prior report. From these additional data, we can paraphrase the concluding comment of that paper: The evidence shows that the more disadvantaged are more aggressive in attitude and experience. To the extent that (a) this aggressiveness is strongly reinforced through a steady exposure to violent TV fare, (b) such content is perceived as acceptable, liked, found to be humorous, seen as less violent, and (c) few counter aggression messages are received from family, peers, or other socializing agencies, then the outcome has significant social implications.

REFERENCES

Berkowitz, L., "Aggressive Cues in Aggressive Behavior and Hostility Catharsis", Psychological Review, 1964, 71, pp. 104-122.

Berkowitz, L., "Some Aspects of Observed Aggression", Journal of Personality and Social Psychology, 1965, 2, 359-369.

Chilman, C. S., "Child Rearing and Family Relationship Patterns of the Very Poor", Welfare in Review, Vol 3, No. 1, January 1965, pp. 9-19.

Clark, K. B., Dark Ghetto: Dilemmas of Social Power, New York: Harper & Row, 1965.

Gans, H. J., The Urban Villagers: Group and Class in the Life of Italian Americans, Glencoe, Illinois: Free Press, 1962.

Greenberg, B. and T. Gordon, "Social Class and Racial Differences in Children's Perception of Television Violence," Dept. of Communication, Michigan State University (mimeo), February, 1971, 34 pp.

Hicks, D., "Short- and Long-Term Retention of Affectively Varied Modeled Behavior," Psychonomic Science, 1968, 11, 369-370.

Himmelweit, Hilde T., A. N. Oppenheim, and Pamela Vince, Television and the Child, New York: Oxford University Press, 1958.

McGuire, W., "Attitudes and Opinions," Annual Review of Psychology, 1966, 17, 475-514.

Sears, R. R., "Relation of Early Socialization Experiences to Aggression in Middle Childhood", Journal of Abnormal and Social Psychology, 1961, 63, pp. 466-492.

Siegel, S., Non-parametric Statistics for the Behavioral Sciences, New York: McGraw-Hill, 1956.

U.S. Government, Report of the National Advisory Commission on Civil Disorders, New York: Bantam, 1968.

APPENDIX 1

Scene Descriptions

First Scene (Practice--same for both versions): A girl is being held captive by two men in a remote cabin. The girl breaks free and runs into the woods. The men chase her from different directions. Rapid cutting builds an air of suspense until one man, laughing, jumps from behind some bushes and grabs the startled girl, face-to-face in a bear hug. (Taken from "The FBI"--1 min. 5 sec.)

Second Scene (Version One): In a plush business office an angry man in a business suit confronts two other businessmen. The angry man begins shouting and smashing furniture with his bare hands, as the other men look on in dismay. (Laugh track deleted from test scene. Taken from "Get Smart"--21 sec.)

(Version Two): In the early morning quiet of a city street, a woman in robe and with hair in curlers approaches a car parked near a bar. Shouting about her no-good drunkard husband she begins smashing the glass and fenders of the car with a baseball bat. A police car approaches, two policemen get out and subdue the woman. (Taken from "Adam-12"--25 sec.)

Third Scene (Control--same for both versions): A boy and dog walk slowly past some adobe houses. Peaceful music accompanies them as they stroll into a wooded area in the shadows of late afternoon. (Taken from "Lassie"--25 sec.)

Fourth Scene (Version One): In the large stately house, a man glares at a group of his peers. In admission of his guilt he screams, "All right, I did it, I killed her." A friend tries to stop him as he runs from the room and is knocked to the floor. Running from the room, he pushes a button to open the huge iron gates to the manor, jumps in his car and speeds off. Through a malfunction, the gates fail to open and the car crashes into the gates and bursts into flames. (Taken from "Name of the Game"--37 sec.)

(Version Two): A burglar, in the bedroom of a sleeping young woman, is trying to remove a photograph from a glass frame. The frame slips and crashes to the floor, wakeing the woman. The burglar takes a pillow and forces it over the woman's face. With her limp body in his arms, he walks to the third-story bedroom window and drops her out. (Taken from "Paris 7000"--23 sec.)

Fifth Scene (Version One): A man with sawed-off shotgun cautiously peers around the corner in a corridor. Satisfied, he steps out, takes careful aim and pulls the trigger. Inside a glass-walled office a man is sitting behind a desk with his back to the assassin. The blast hurls the man, flying glass and debris across the desk. He ends up sprawled on the floor. (Taken from "Hawaii Five-O"--15 sec.)

(Version Two): In a crowded parking lot, a man is preparing to drive away from a social gathering. Guests are standing on a nearby porch with drinks in hand. As he approaches a gate, a car pulls through the gate and stops, blocking the exit. Annoyed, he honks his horn and hollers at the guy to "move it". The second man gets out, walks around his car, pushes a pistol in the first man's face and pulls the trigger. The guests' heads turn in slow motion to the roll of a harp. (Taken from "The Bold Ones"--20 sec.)

Sixth Scene (Control--same for both versions): As a lone motorcycle rider travels down a dirt road other riders, dressed as Indians and howling, race up the road embankment as if to attack. Instead, all riders continue down the road and out of sight around a bend. (Taken from "Bronson"--22 sec.)

Seventh Scene (Version One): A man opens the door of his female companion's apartment and escorts her inside. As he turns to close the door a second man hits him on the head, knocking him dazed to the floor. The intruder grabs the girl and she struggles to get free. Regaining his senses, the woman's companion jumps on the intruder and a fist-fight starts. In attempting to escape, the intruder's path lies along a long scatter rug which his pursuer pulls. Losing his footing, the intruder crashes to the floor, striking his head and is unconscious. (Taken from "Paris 7000"--37 sec.)

(Version Two): In a stylish middle-class apartment, the private eye holds a gun on the villain as he questions him. The villain relates that the action will take place at a specific hour. As the private eye glances at his watch the villain knocks the gun away and a fist-fight starts. Crashing over the furniture, the lamps are knocked out and the fight continues in semidarkness. The private eye hits the villain into a semi-conscious state, grabs the gun, and holds him at bay. (Taken from "Mannix"--35 sec.)